

著作目録（池上雄作）

著者	東北大学史料館
号	545
発行年	1994-03
URL	http://hdl.handle.net/10097/00065362

池上雄作教授著作目録

平成6年3月
東北大学記念資料室
(著作目録第545号)



池 上 雄 作 教 授 略 歴

生年月日 昭和5(1930)年12月29日

出生地 山形県

学 歴

昭和28年3月 東北大学理学部化学科卒業

学 位

昭和37年3月 理学博士(東北大学)

職 歴

昭和29年10月 東北大学非水溶液化学研究所助手

〃 39年4月 〃 〃 助教授

〃 40年9月 フルブライト博士研究員として化学研究のためアメリカ合衆国に出張
(昭和41年11月まで)

〃 49年4月 東北大学非水溶液化学研究所教授

平成元年4月 〃 〃 所長

〃 3年4月 東北大学反応化学研究所教授

〃 3年4月 〃 〃 所長(平成4年4月1日まで)

学会ならびに社会における活動

昭和63年3月 日本化学会東北支部副支部長(平成元年2月まで)

〃 53年5月 財団法人日本化学研究会理事

〃 61年7月 〃 理事長(現在にいたる)

著 作 目 録

(1953~1993)

[1] トロポイド化合物の有機物理化学的研究

- (1) Synthesis and Properties of 4-Hydroxytropone, T.Nozone, T.Mukai, Y.Ikegami, T.Toda, Chem. & Ind., 66-67 (1955, No.1)
- (2) Infrared Spectra of Troponoid Compounds. I. Tropone and Tropolone, S.Kinumaki, K.Aida, Y.Ikegami, Sci.Repts.Res.Inst., Tohoku Univ. Ser.A, **8**(3), 263-269 (1956)
- (3) アミノトロポンとその関連化合物の赤外線吸収, 絹巻烝, 池上雄作, 会田高陽, 東北大学非水溶液化学研究所報告, **6** (2), 49-60 (1956)
- (4) Infrared Spectra of Some Troponoid and Aromatic Compounds Adsorbed on Column Chromatogram, S.Kinumaki, Y.Ikegami, Sci.Repts.Res.Inst., Tohoku Univ. Ser.A, **10**(4), 315-324 (1958)
- (5) トロポノイド化合物の赤外線吸収 (総報), 池上雄作, 化学の領域 増刊38号, 赤外線吸収スペクトル 第8集, 33-84 (1959, 9月); [追記] 増刊68号, 赤外線吸収スペクトル 第17集, 177-178 (1965, 4月)
- (6) トロポノイドのマンニッヒ塩基とその応用 (第3報). 5-位に置換基をもつ 3,7-Dibromo-tropolone 類の赤外線および紫外線吸収スペクトル, 小倉協三, 池上雄作, 東北大学非水溶液化学研究所報告, **9** (1), 23-43 (1959)
- (7) Infrared Spectra of Troponoid Compounds. II. Absorption Band of O-H Stretching Vibration in Some Tropolones, Y.Ikegami, Bull.Chem.Soc.Jpn., **34**(1), 91-93 (1961)
- (8) Infrared Spectra of Troponoid Compounds. III. Tropolone and 2-Deuterioxytropone, Y.Ikegami, Bull.Chem.Soc.Jpn., **34**(1), 94-98 (1961)
- (9) トロポイドとキノン誘導体の反応. 第4報. 数種のトロポロンとp-ベンゾキノンの反応生成物およびその関連化合物の赤外線ならびに紫外線吸収スペクトル, 瀬戸秀一, 池上雄作, 佐藤文夫, 東北大学非水溶液化学研究所報告, **11** (1, 2), 85-104 (1962)
- (10) Infrared Spectra of Troponoid Compounds. IV. Infrared and Raman Spectra of Tropone, Y.Ikegami, Bull.Chem.Soc.Jpn., **35**(6), 967-971 (1962)
- (11) Infrared Spectra of Troponoid Compounds. V. Absorption Bands in the Region of $1700-1530\text{ cm}^{-1}$ of Tropone, 2-Chlorotropone and Tropolone, Y.Ikegami, Bull.Chem.Soc. Jpn., **35**(6), 972-977 (1962)

- (12) The Infrared Spectra of Troponoid Compounds. VI. The Infrared and Raman Spectra of Tropolone, 3- and 4-Isopropyltropolones, Y.Ikegami, Bull.Chem. Soc.Jpn., **36**(9), 1118-1125 (1963)
 - (13) The Reaction of Tropoids and Quinone Derivatives. VI. On the Structures of the Reaction Products of p-Benzoquinone-dibenzenesulfonimide with Phenol or Tropolone, Y.Nishiyama, Y.Ikegami, S.Seto, Bull.Chem.Soc.Jpn., **38**(1), 72-76 (1965)
 - (14) トロポロンの赤外ラマンスペクトル, 池上雄作, 東北大学非水溶液化学研究所報告, **14** (2), 237-253 (1965)
 - (15) トロポイドとキノン誘導体の反応 (第6報). p-Benzoquinone-dibenzenesulfonimide とフェノールおよびトロポロンとの反応生成物の構造, 西山行大, 池上雄作, 瀬戸秀一, 東北大学非水溶液化学研究所報告, **15** (1), 99-118 (1965)
 - (16) 4'-ジメチルアミノスチリルトロポロン類について, 瀬戸秀一, 佐々木紘子, 池上雄作, 東北大学非水溶液化学研究所報告, **15** (1), 127-150 (1965)
 - (17) 数種のトロポロン類における水酸基プロトンの化学シフト, 池上雄作, 池上恒男, 瀬戸秀一, 工業化学雑誌, **68** (8), 1415-1417 (1965) ; 非水溶液化学研究所報告, **15** (2), 103-109 (1966)
 - (18) ビリジノン-トロポロン類2成分系における酸プロトンの化学シフト, 池上雄作, 池上恒男, 瀬戸秀一, 工業化学雑誌, **68** (8), 1417-1419 (1965) ; 非水溶液化学研究所報告, **15** (2), 111-116 (1966)
 - (19) メチル-およびイソプロピル-トロポロン類の赤外ラマンスペクトル, 池上雄作, 東北大学非水溶液化学研究所報告, **17** (1), 45-64 (1967)
 - (20) Long-Range Spin Coupling between the Methoxyl and Ring Protons in 2-Methoxytropone Derivatives and Its Applications, S.Seto, K.Ogura, H.Toda (Sasaki), Y.Ikegami, T.Ikenoue, Bull.Chem.Soc.Jpn., **41**(11), 2696-2699 (1968)
 - (21) Isolation of 2-Mercaptotropone as a 2:1 Complex with 1,1,6,6-Tetra-phenylhexa-2,4-diyne-1,6-diol and X-Ray Crystal Structure of the Complex, F.Toda, K.Tanaka, T.Asao, Y.Ikegami, N.Tanaka, K.Hamada, T.Fujiwara, Chem.Lett., 509-512 (1988, No.3)
- [2] 有機ラジカルの生成と構造
- (22) ESR Spectrum of Tropone Anion Radical, Y.Ikegami, S.Seto, Bull.Chem. Soc.Jpn., **41**(9), 2225 (1968)

- (23) The E.S.R. Spectra of 1,1'- and 2,2'-Biazulenyl Anion Radicals, Y.Ikegami, S.Seto, *Mol.Phys.*, **16**(1), 101-103 (1969)
- (24) An Electron Spin Resonance Study of 1,1'- and 2,2'-Biazulenyl Anion Radicals, Y.Ikegami, S.Seto, *Bull.Chem.Soc.Jpn.*, **43**(8), 2409-2413 (1970)
- (25) 1,1'- および 2,2'- ビアズレニルアニオンラジカルの ESR スペクトル, 池上雄作, 瀬戸秀一, 東北大学非水溶液化学研究所報告, **20** (2), 179-192 (1970)
- (26) The ESR Spectra of 2- and 6-Methoxyazulene Anion Radicals, Y.Ikegami, S.Seto, *Bull.Chem.Soc.Jpn.*, **44**(7), 1905-1908 (1971)
- (27) 2,7-ジメチルナフト-2,3':4,5-トロポニアニオンラジカル, 池上雄作, 渡辺英俊, 瀬戸秀一, 東北大学非水溶液化学研究所報告, **22** (1), 85-88 (1972)
- (28) An Electron Spin Resonance Study of the Tropone Anion Radical, Y.Ikegami, H.Watanabe, S.Seto, *Bull.Chem.Soc.Jpn.*, **45**(7), 1976-1978 (1972)
- (29) The ESR Spectra of the Anion Radicals of 2-Methoxytropone and Its Derivatives, Y.Ikegami, H.Watanabe, S.Seto, *Chem.Lett.*, 877-880 (1972, No. 10)
- (30) Formation of Naphthalene Anion by the Reaction of 4-Phenyl-1,3-dioxan with Sodium-Potassium Alloy, M.Iwaizumi, K.Ogura, Y.Ikegami, T.Matsuzaki, T.Isobe, *J.Chem.Soc., Chem.Comm.*, 1230-1231 (1972, No. 22)
- (31) The ESR Spectrum of 2-Dimethylaminoazulene Anion Radical, Y.Ikegami, H.Watanabe, S. Seto, *Bull.Chem.Soc.Jpn.*, **45**(7), 2205 (1972)
- (32) The ESR Spectra of the Nitrotropolonate Anion Radicals, Y.Ikegami, S.Seto, *Chem. Lett.*, 155-158 (1973, No. 2)
- (33) Restricted Rotation in 5-Nitrosotropolone and the Anion Radical, Y.Ikegami, T.Asao, *Chem.Lett.*, 805-808 (1974, No. 7)
- (34) An Electron Spin Resonance Study of the Anion Radicals of Some Nitrotropolonates and 2-Methoxy-5-nitrotropone, Y.Ikegami, S.Seto, *Bull. Chem.Soc.Jpn.*, **48**(1), 140-143 (1975)
- (35) ESR Spectra of the Pleiadiene Ion Radicals, Y.Ikegami, M.Iwaizumi, I.Murata, *Chem. Lett.*, 1141-1144 (1974, No. 10)
- (36) An Anion Radical Precursor in the Nucleophilic Substitution of o-Dinitrobenzene, T.Abe, Y.Ikegami, *Bull.Chem.Soc.Jpn.*, **49**(11), 3227-3231 (1976)

- (37) Photochemistry of 5,5'-Bi-2-isoxazoline and Its Related Compounds. Evidence for Radical Generation in the Photochemistry of 2-Isoxazoles, H.Saiki, T.Miyashi, T.Mukai, Y.Ikegami, *Tetrahedron Lett.*, No.52, 4619-4622 (1977)
- (38) An Anion Radical Precursor in the Nucleophilic Substitution of p-Dinitrobenzene, T.Abe, Y.Ikegami, *Bull.Chem.Soc.Jpn.*, **51**(1), 196-200 (1978)
- (39) 反応中間体有機ラジカルの研究 (2). p- ジニトロベンゼンの求核置換反応におけるアニオンラジカル前駆体, 池上雄作, 阿部武弘, 旭硝子工業技術奨励会研究報告, **32**, 197-203 (1978)
- (40) Anisotropic Hyperfine Interaction in the Electron Spin Resonance Spectrum of the Methyl Radical Trapped in $\text{CH}_3\text{COONa} \cdot 3\text{D}_2\text{O}$ Crystal at Low Temperatures, S.Kubota, M.Iwaizumi, Y.Ikegami, K.Shimokoshi, *J.Chem. Phys.*, **71**(12), 4771-4776 (1979)
- (41) Radicals Generated in Autoxidized Methyl Linoleate by Light Irradiation, T.Chiba, K.Fujimoto, T.Kaneda, S.Kubota, Y.Ikegami, *J.Am.Oil Chem.Soc.*, **58**(5), 587-590 (1981)
- (42) ESR Spectra of Anion Radicals of 8,8-Dicyanoheptafulvene and Its 4,5-Benzo Derivative, Y.Ikegami, T.Muramatsu, T.Asao, *Bull.Chem.Soc. Jpn.*, **55**(3), 651-653 (1982)
- (43) Novel Photoreactions of Benzhydrylidenequadricyclane and Quadricyclanone: A New Route to Trimethylenemethane and Oxyallyl Derivatives, T.Hirano, T.Kumagai, T.Miyashi, K.Akiyama, Y.Ikegami, *J.Org.Chem.*, **56**(5), 1907-1914 (1991)
- (44) Synthesis and Characterization of Novel p-Terphenoquinone Analogues Involving a Central Dihydrothiophenediylidene Structure, K.Takahashi, T.Suzuki, K.Akiyama, Y.Ikegami, Y.Fukazawa, *J.Am.Chem.Soc.*, **113**(12), 4576-4583 (1991)
- (45) Inversion of the Ground-State Spin Multiplicity by Electron-Withdrawing Groups in Trimethylenemethane Derivatives Generated Photochemically from Methylene-quadricyclane Derivatives, T.Hirano, T.Kumagai, T.Miyashi, K.Akiyama, Y.Ikegami, *J.Org.Chem.*, **57**(3), 876-882 (1992)
- (46) Synthesis and Characterization of New Conjugation-extended Viologens Involving a Central Aromatic Linking Group, K.Takahashi, T.Nihira, K.Akiyama, Y.Ikegami, E.Fukuyo, *J.Chem.Soc., Chem.Comm.*, 620-622 (1992, No.8)

[3] ピリジニルラジカル化学の新展開

- (47) A Pyridinyl Diradical. Preparation and Association, E.M.Kosower, Y.Ikegami, J.Am.Chem.Soc., **89**(2), 461-462 (1967); 東北大学非水溶液化学研究所報告, **17**(1), 41-44 (1967)
- (48) A Stable Free Radical, 1-Methyl-2-methoxycarbonylpyridinyl, H.Watanabe, Y.Ikegami, S.Seto, Chem.Lett., 1107-1110 (1972, No 11)
- (49) 吸収スペクトル測定用液体窒素デュワーの試作, 松村善二郎, 池上雄作, 東北大学非水溶液化学研究所報告, **22**(2), 193-196 (1972)
- (50) Associated Triplet States of Pyridinyl Radicals, Y.Ikegami, H.Watanabe, S.Seto, J.Am.Chem.Soc., **94**(9), 3274-3275 (1972)
- (51) Singlet-Triplet Transformation in the Dimeric Association of Pyridinyl Radicals, Y.Ikegami, S.Seto, J.Am.Chem.Soc., **96**(25), 7811-7812 (1974)
- (52) Photolysis and Association of 1-Benzyl-4-methoxycarbonylpyridinyl, Y.Ikegami, H.Watanabe, Chem.Lett., 1007-1010 (1976, No 9)
- (53) Solvent Effects on the Hyperfine Splitting Constants of 1-Methyl-4-methoxycarbonyl- and 1-Methyl-4-acetylpyridinyl Radicals, S.Kubota, Y.Ikegami, J.Phys.Chem., **82**(25), 2739-2743 (1978)
- (54) 反応中間体有機ラジカルの研究 (1). 中性ラジカル, 1-ベンジル-4-メトキシカルボニルピリジニル類の性質, 池上雄作, 久保田省三, 旭硝子工業技術奨励会研究報告, **32**, 185-195 (1978)
- (55) Association and Photolysis of 1-Benzyl-4-methoxycarbonylpyridinyls, Y.Ikegami, S.Kubota, H.Watanabe, Bull.Chem.Soc.Jpn., **52**(6), 1563-1567 (1979)
- (56) Studies on the Hyperfine Interactions in the 1-Ethyl-, 1-Isopropyl-, and 1-tert-Butyl-4-methoxycarbonylpyridinyl Radicals, K.Akiyama, S.Kubota, Y.Ikegami, J.Phys.Chem., **85**(1), 120-122 (1981)
- (57) Monomer-Dimer Equilibrium and Photochemical Behaviors of the 1-Methyl-4-phenylpyridinyl Radical, K.Akiyama, S.Kubota, Y.Ikegami, Chem.Lett., 469-472 (1981, No 4)
- (58) 1-Alkyl-2-(carbomethoxy)pyridinyl Radicals: Monomers and Dimers Defined through Chemical and Photochemical Properties and Electron Paramagnetic Resonance, J.Hermolin, M.Levin, Y.Ikegami, M.Sawayanagi, E.M.Kosower, J.Am.Chem.Soc., **103**(16), 4795-4800 (1981)

- (59) An Electron Spin Resonance Study on the Properties of 1-Methyl-2-methoxycarbonylpyridinyl and the Dimer, Y.Ikegami, M.Sawayanagi, S.Kubota, *Heterocycles*, **15**(2), 1027-1032 (1981)
- (60) Decay Mechanism of the 1-Hydro-4-phenylpyridinyl Radical, Y.Sano, S.Tero-Kubota, O.Ito, Y.Ikegami, *Chem.Lett.*, 657-660 (1982, No. 5)
- (61) Monomer-Dimer Equilibrium of the 1-Methyl-2-methoxycarbonylpyridinyl Radical in 2-methyltetrahydrofuran Solution. Kinetic and Thermodynamic Studies by Electron Spin Resonance Spectroscopy, S.Tero-Kubota, Y.Sano, Y.Ikegami, *J.Am.Chem.Soc.*, **104**(13), 3711-3714 (1982)
- (62) Theory of Solvent Effects on the Hyperfine Splitting Constants in ESR Spectra of Free Radicals, T.Abe, S.Tero-Kubota, Y.Ikegami, *J.Phys.Chem.*, **86**(8), 1358-1365 (1982)
- (63) Dimerization Mechanism of the 1-Alkyl-4-phenylpyridinyl Radicals Generated from the Photosensitive Dimer As Studied by Kinetic ESR Spectroscopy, K.Akiyama, S.Tero-Kubota, Y.Ikegami, *J.Am.Chem.Soc.*, **105**(11), 3601-3604 (1983)
- (64) Solvent Effects on the Monomer-Dimer Equilibrium and Dimerization of the 1-Methyl-2-methoxycarbonylpyridinyl Radical, H.Shimoishi, S.Tero-Kubota, Y.Ikegami, *Bull.Chem.Soc.Jpn.*, **58**(2), 553-557 (1985)
- (65) Photolytic Generation and the Subsequent Dimerization of 4-Alkyl-1-methylpyridinyl Radicals in Solution as Studied by Steady-State and Kinetic ESR Spectroscopy, K.Akiyama, T.Ishii, S.Tero-Kubota, Y.Ikegami, *Bull.Chem.Soc.Jpn.*, **58**(12), 3535-3539 (1985)
- (66) Photochemical Generation of 1,1'-Ethylenebis(pyridinyl) Diradical from Its Cyclomers, T.Muramatsu, K.Hanaya, Y.Ikegami, *Chem.Lett.*, 2139-2142 (1986, No. 12)
- (67) The 1,1'-Trimethylenebis(pyridinyl) Diradical and Its Photosensitive Cyclomers, T.Muramatsu, K.Hanaya, S.Onodera, Y.Ikegami, *Chem.Lett.*, 1683-1686 (1987, No. 8)
- (68) The 1,1'-Ethylenebis[4-(methoxycarbonyl)pyridinyl] Diradical and Its Photosensitive Cyclomers, Y.Ikegami, T.Muramatsu, K.Hanaya, S.Onodera, N.Nakayama, E.M.Kosower, *J.Am.Chem.Soc.*, **109**(10), 2876-2880 (1987)
- (69) Photosensitive Cyclomer Formation of 1,1'-(1,2-Ethanediyl) bis(pyridinyl) Diradical and Its Derivatives, Y.Ikegami, T.Muramatsu, K.Hanaya, *J.Am.Chem.Soc.*, **111**(15), 5782-5787 (1989)

- (70) The Thermal and Photochemical Behaviors of the Cyclomers Derived from 1,1'-(1,3-Propanediyl) bis (pyridinyl) Diradicals, T.Muramatsu, Y.Ikegami, K.Hanaya, S.Onodera, Bull.Chem.Soc.Jpn., **63**(5), 1413-1421 (1990)
- (71) Extremely Long C-C Single Bonds in Stereomers of 6,7,12a,12b-Tetrahydrodipyrido[1,2-a:2',1'-c]pyrazine, T.Muramatsu, A.Toyota, K.Hanaya, Y.Ikegami, Chem.Lett., 493-496 (1990, No. 2)
- (72) Unusual Bonding in the Isomers of 6,7,13a,13b-Tetrahydro-6H-dipyrido[1,2-a:2',1'-c][1,4]diazepine, A.Toyota, T.Muramatsu, K.Hanaya, Y.Ikegami, Chem.Lett., 705-708 (1991, No. 3)
- (73) The Length of a C-C Single Bond Joining Two 1,2-Dihydropyridine Rings in 6,7,12a,12b-Tetrahydrodipyrido[1,2-a:2',1'-c]pyrazine and its Congeners, A.Toyota, T.Muramatsu, Y.Ikegami, J.Mol.Structure (Theochem), 印刷中 (1994)

[4] 時間分解 ESR 法による光反応初期過程の研究

- (74) Evidence of the Singlet Radical Pair Precursor in the Photolytic Generation of 1,4-Dimethylpyridinyl Radical from its Dimer. A CIDEP Study, K.Akiyama, S.Tero-Kubota, T.Ikenoue, Y.Ikegami, Chem.Lett., 903-906 (1984, No. 6)
- (75) Spin Polarization Conservation during the Excitation Energy Transfer in Fluid Solution, K.Akiyama, S.Tero-Kubota, Y.Ikegami, T.Ikenoue, J.Am. Chem.Soc., **106**(26), 8322-8323 (1984)
- (76) Dimerization Rate of the 1-Methyl-4-tert-butylpyridinyl Radical and the Photochemical Process of the Dimer Cleavage. Kinetic and Time-Resolved ESR Studies, K.Akiyama, S.Tero-Kubota, Y.Ikegami, T.Ikenoue, J.Phys. Chem., **89**(2), 339-342 (1985)
- (77) A Time-Resolved ESR Study on the Photochemical Reduction of Nitrobenzene Derivatives in Alcoholic Solution, K.Akiyama, Y.Ikegami, T.Ikenoue, S.Tero-Kubota, Bull.Chem.Soc.Jpn., **59**(10), 3269-3270 (1986)
- (78) Polarized ESR Spectra of the Triplet Enols Generated from o-Methylacetophenone and Related Compounds, K.Akiyama, Y.Ikegami, S.Tero-Kubota, J.Am.Chem.Soc., **109**(4), 2538-2539 (1987)
- (79) A CIDEP Study on the Photoreaction Mechanism of o-Quinones, H.Shimoishi, K.Akiyama, S.Tero-Kubota, Y.Ikegami, Chem.Lett., 251-254 (1988, No. 2)

- (80) The Polarized ESR Spectrum of 1-Methyl-3-methoxycarbonylpyridinyl Radical, K.Akiyama, Y.Ikegami, Chem.Lett., 255-256 (1988, No.2)
- (81) Time-Resolved E.S.R. Study of Triplet Ketoamines Generated by Intramolecular Proton Transfer in Free Schiff Bases, S.Tero-Kubota, K.Migita, K.Akiyama, Y.Ikegami, J.Chem.Soc., Chem.Comm., 1067-1068 (1988, No.16)
- (82) Influence of Solvent Polarity on the Excited Triplet States of Non-phosphorescent 1,2-Naphthoquinone and Phosphorescent 9,10-Phenanthrenequinone: Time-Resolved Triplet ESR and CIDEP Studies, H.Shimoishi, S.Tero-Kubota, K.Akiyama, Y.Ikegami, J.Phys.Chem., **93**(14), 5410-5414 (1989)
- (83) o-およびp-アミノアセトフェノンの励起三重項状態の時間分解 ESR, 秋山公男, 手老省三, 生駒忠昭, 池上雄作, 日本化学会誌, 1463-1466 (1989, No.8)
- (84) Time-Resolved ESR Studies on the Excited Triplet States and Photoenolization of 2-Methylacetophenone and Related Molecules, T.Ikoma, K.Akiyama, S.Tero-Kubota, Y.Ikegami, J.Phys.Chem., **93**(20), 7087-7091 (1989)
- (85) Spin Polarization Conservation During Triplet-Triplet Energy Transfer in Fluid Solution as Studied by Time-Resolved ESR Spectroscopy, K.Akiyama, A.Kaneko, S.Tero-Kubota, Y.Ikegami, J.Am.Chem.Soc., **112**(9), 3297-3301 (1990)
- (86) CIDEP Studies on Radicals Produced from Photochemical Reactions of Some Aromatic Carbonyl Compounds, T.Ikoma, K.Akiyama, S.Tero-Kubota, Y.Ikegami, Chem.Lett., 1491-1494 (1990, No.9)
- (87) Time-Resolved EPR Studies on the Photochemical Hydrogen Abstraction Reactions and the Excited Triplet States of 4-Substituted Pyridines, S.Tero-Kubota, K.Akiyama, T.Ikoma, Y.Ikegami, J.Phys.Chem., **95**(2), 766-770 (1991)
- (88) A Time-Resolved EPR Study on the Excited Triplet State of Nonphosphorescent Tropone, T.Ikoma, K.Akiyama, S.Tero-Kubota, Y.Ikegami, J.Phys.Chem., **95**(19), 7119-7121 (1991)
- (89) Time-Resolved EPR Observation of the Short-lived Excited Triplet States of Diamagnetic Metallophthalocyanines in a Rigid Glassy Matrix, K.Akiyama, S.Tero-Kubota, Y.Ikegami, Chem.Phys.Lett., **185**(1,2), 65-67 (1991)

- (90) Time-Resolved EPR Spectra of the Excited Triplet States Generated from the Photoinduced Intramolecular Proton Transfer and from the Direct Excitation Reactions in 2-(N-Phenylacetimidoyl)-1-naphthol, S.Tero-Kubota, T.Noguchi, A.Katsuki, K.Akiyama, Y.Ikegami, *Chem.Phys.Lett.*, **187**(4), 423-426 (1991)
 - (91) Excited Triplet State Generated from Excited State Intramolecular Proton Transfer in 2-(2'-Hydroxyphenyl) benzothiazole, S.Tero-Kubota, K.Akiyama, F.Shoji, Y.Ikegami, *J.Chem.Soc., Chem.Comm.*, 641-643 (1992, No. 8)
 - (92) A Time-Resolved Electron Paramagnetic Resonance Study on the Photoinduced Electron Transfer Reactions from Metalloporphyrins to Quinones, S.Yamauchi, T.Ueda, M.Satoh, K.Akiyama, S.Tero-Kubota, Y.Ikegami, M.Iwaizumi, *J.Photochem.Photobiol. A:Chem.*, **65**, 177-182 (1992)
 - (93) Structural Effects on the Radiationless Transition from the T_1 States of Tropone Derivatives, T.Ikoma, K.Akiyama, S.Tero-Kubota, Y.Ikegami, *J.Phys.Chem.*, **97**(2), 303-305 (1993)
 - (94) CIDEP Study on the Photosensitized Reactions of p-Benzoquinone and Hydroquinone by Eosin Y, A.Katsuki, S.Tero-Kubota, Y.Ikegami, *Chem. Phys.Lett.*, **209**(3), 258-262 (1993)
- [5] 生体内酸化還元系における活性酸素ラジカルの研究
- (95) Generation of Free Radicals and Initiation of Radical Reactions in Nitrones- Fe^{2+} -Phosphate Buffer Systems, S.Tero-Kubota, Y.Ikegami, T.Kurokawa, R.Sasaki, K.Sugioka, M.Nakano, *Biochem.Biophys.Res.Comm.*, **108**(3), 1025-1031 (1982)
 - (96) Generation of Hydroxyl Radicals during the Enzymatic Reductions of the Fe^{3+} -ADP-Phosphate-Adriamycin and Fe^{3+} -ADP-EDTA Systems. Less Involvement of Hydroxyl Radical and a Great Importance of Proposed Perferryl Ion Complexes in Lipid Peroxidation, K.Sugioka, H.Nakano, M.Nakano, S.Tero-Kubota, Y.Ikegami, *Biochim.Biophys.Acta*, **753**, 411-421 (1983)
 - (97) Spin Trapping Study on the Generation Mechanism of Active Oxygen Radicals in the Enzymatic Reduction of Quinoid Antitumor Agents, S.Tero-Kubota, Y.Ikegami, K.Sugioka, M.Nakano, *Chem.Lett.*, 1583-1586 (1984, No. 9)

- (98) Clear Evidence for the Participation of $\cdot\text{OH}$ in λ DNA Breakage Induced by the Enzymatic Reduction of Adriamycin in the Presence of Iron-ADP. Importance of Local $\cdot\text{OH}$ Concentration for DNA Strand Cleavage, K.Sugioka, H.Nakano, J.Tsuchiya, M.Nakano, Y.Sugioka, S.Tero-Kubota, Y.Ikegami, *Biochem.International*, **9**(2), 237-242 (1984, 8月)
- (99) Importance of Fe^{2+} -ADP and the Relative Unimportance of $\cdot\text{OH}$ in the Mechanism of Mitomycin C-Induced Lipid Peroxidation, H.Nakano, K.Sugioka, M.Nakano, M.Mizukami, H.Kimura, S.Tero-Kubota, Y.Ikegami, *Biochim.Biophys.Acta*, **796**, 285-293 (1984)
- (100) DNA Strand Scission by Enzymatically Reduced Mitomycin C: Evidence for Participation of the Hydroxyl Radical in the DNA Damage, K.Hamana, K.Kawada, K.Sugioka, M.Nakano, S.Tero-Kubota, Y.Ikegami, *Biochem. International*, **10**(2), 301-309 (1985, 2月)
- (101) ESR Studies on the Active Intermediate in the Enzymatic Reduction of the Fe-Bleomycin Complex, S.Tero-Kubota, Y.Ikegami, K.Sugioka, M.Nakano, *Biochem. International*, **14**(5), 879-887 (1987, 5月)
- (102) Mechanism of O_2^- Generation in Reduction and Oxidation Cycle of Ubiquinones in a Model of Mitochondrial Electron Transport Systems, K.Sugioka, M.Nakano, H.Totsune-Nakano, H.Minakami, S.Tero-Kubota, Y.Ikegami, *Biochim.Biophys.Acta*, **936**, 377-385 (1988)
- (103) Non-Enzymatic Oxidation of NAD(P)H by Pyrroloquinoline Quinone (PQQ): Generation of H_2O_2 and O_2^- , M.Nakano, K.Sugioka, S.Tero-Kubota, Y.Ikegami, *Studies in Organic Chemistry*, **33**, 443-447 (1988)
- (104) Properties of a Coenzyme, Pyrroloquinoline Quinone: Generation of Active Oxygen Species during a Reduction-Oxidation Cycle in the Presence of NAD(P)H and O_2 , K.Sugioka, M.Nakano, I.Naito, S.Tero-Kubota, Y.Ikegami, *Biochim.Biophys.Acta*, **964**, 175-182 (1988)

[6] そ の 他

・有機構造化学

- (105) 2-Benzamido-4,5-dicarboxythiazole とジアゾメタンとの反応生成物ならびにその関連化合物の赤外線および紫外線吸収スペクトル, 西山行大, 池上雄作, 東北大学非水溶液化学研究所報告, **12** (1,2), 43-54 (1963)
- (106) The Formation of 1,6-Dithia-3a-azonia-2,3,4,5-tetrahydropentalene Salt, S.Seto, Y.Ikegami, *Bull.Chem.Soc.Jpn.*, **36**(6), 730-734 (1963)

- (107) 1,6-Dithia-3a-azonia-2,3,4,5-tetrahydropentalene Salt の生成, 瀬戸秀一, 池上雄作, 東北大学非水溶液化学研究所報告, **13** (1), 77-90 (1963)
- (108) The Hydrogen-Stretching Absorptions and Conformations of Tetralin-1-ol, Chroman-4-ol, Thiochroman-4-ol, and Indan-1-ol Derivatives, K.Hanaya, S.Onodera, Y.Ikegami, H.Kudo, K.Shimaya, J.Chem.Soc., Perkin Trans. 2, 944-947 (1981)
- (109) Conformations of 3-Alkoxycarbonyl-2-tetralols and 2-Ethoxycarbonyl-4-chromanols, K.Hanaya, T.Muramatsu, S.Onodera, Y.Ikegami, M.Hirota, Bull. Chem.Soc.Jpn., **57**(6), 1695-1696 (1984)
- (110) Preferred Conformations of cis-4-Hydroxy-2-chromancarboxylates and Related Compounds. Molecular Force Field Interpretation, M.Hirota, K.Abe, M.Shibata, H.Suezawa, K.Hanaya, T.Muramatsu, Y.Ikegami, Bull.Chem. Soc.Jpn., **57**(9), 2445-2449 (1984)

・超低温下における有機ラジカルの磁性研究

- (111) Magnetic Susceptibility of a Linear Chain Antiferromagnet, TANOL, at Very Low Temperatures, M.Kumano, Y.Ikegami, T.Sato, S.Saito, Chem.Phys. Lett., **41**(2), 354-356 (1976)
- (112) Long Range Ordering of a Linear-Chain Heisenberg Antiferromagnet, TANOL, below 1K, M.Kumano, Y.Ikegami, T.Sato, S.Saito, Chem.Phys. Lett., **52**(3), 497-499 (1977)
- (113) Anisotropic EPR Line-Width in a Linear Chain-Like Organic Free Radical, TANOL, M.Kumano, Y.Ikegami, Chem.Phys.Lett., **54**(1), 109-110 (1978)
- (114) Temperature Inhomogeneity in the Glass Mixing Chamber of a $^3\text{He}/^4\text{He}$ Dilution Refrigerator, M.Kumano, Y.Ikegami, T.Sato, S.Saito, Rev.Sci. Instrum., **50**(1), 24-25 (1979)
- (115) Semiautomatic Mutual Inductance Bridge for Magnetic Susceptibility Measurements, M.Kumano, Y.Ikegami, Rev.Sci.Instrum., **50**(7), 921-922 (1979)
- (116) Spin Flopping Transition in a Linear Chain-Like Organic Free Radical, TANOL, below 0.5 K, M.Kumano, Y.Ikegami, Chem.Phys.Lett., **70**(1), 114-116 (1980)
- (117) 磁化率測定用 $^3\text{He}/^4\text{He}$ 希釈冷却器の製作, 熊野勝文, 池上雄作, 東北大学非水溶液化学研究所報告, **30**, 1-4 (1980)
- (118) 交流磁化率測定用ヘリウムデュワーびんの試作, 熊野勝文, 池上雄作, 松村善二郎, 熊野ひろみ, 東北大学非水溶液化学研究所報告, **30**, 5-8 (1980)

- (119) Liquid Helium Cryostat for ESR Measurements Free from Bubbling Noise, T.Ichikawa, H.Yoshida, H.Yamada, S.Tokairin, Y.Ikegami, J.Magn.Reson., **64**, 518-520 (1985)

・無機アンモニウム塩の振動スペクトル

- (120) Phase Transition of the $\text{NH}_4\text{Br}-\text{NH}_4\text{I}$ Mixed Crystals and Librational Motion of the Ammonium Ion, S.Onodera, Y.Ikegami, Spectrochim.Acta, **33A**(8), 771-774 (1977)
- (121) The Librational Motion of the ND_4^+ ion in ND_4I , S.Onodera, Y.Ikegami, Sci.Repts. Res.Inst., Tohoku Univ., Ser.A, **26**(6), 344-349 (1977)
- (122) Far-Infrared Spectra of Ammonium, Potassium, Rubidium, and Cesium Metavanadates, S.Onodera, Y.Ikegami, Inorg.Chem., **18**(2), 466-468 (1979)
- (123) 温度可変赤外用溶液セルの試作, 小野寺信治, 池上雄作, 松村善二郎, 菅野洋一, 東北大学非水溶液化学研究所報告, **29**, 9-11 (1979)
- (124) Infrared and Raman Spectra of Ammonium, Potassium, Rubidium, and Cesium Metavanadates, S.Onodera, Y.Ikegami, Inorg.Chem., **19**(3), 615-618 (1980)

〔著 書〕

- (1) 訳書 “コソワー物理有機化学”, 池上雄作, 広川書店(東京)1970発行
[原書 “An Introduction to Physical Organic Chemistry”, E.M.Kosower, John Wiley & Sons, Inc., New York (1968)]
- (2) ラジオ大学講座 “物質とエネルギー” — 身近な現象の基礎化学 —, 池上雄作, 旺文社, 1982発行
- (3) 放送大学 1986-1989 教材 “物質とエネルギー” (編著), 池上雄作, 放送大学教育振興会, 1986発行
- (4) 放送大学 1990-1993 教材 “物質とエネルギー” (編著), 池上雄作, 放送大学教育振興会, 1990発行
- (5) 分担執筆: “分子を越えて — 錯体の世界” 錯体化学研究会編, 化学同人, 1991発行
「7章 米の飯とお天道様はついてまわる」, 83~96頁
- (6) 分担執筆: “Spin Chemistry” Y.J.I'Haya Ed., Published by the Oji International Conference on Spin Chemistry, 1991発行. Title: S.Yamauchi, T.Ueda, M.Satoh, K.Akiyama, S.Tero-Kubota, Y.Ikegami, M.Iwazumi; CIDEP Studies on the Photoinduced Electron Transfer Reactions from Metalloporphyrins to Quinone, 112-116

- (7) 分担執筆：“活性酸素測定マニュアル” 浅田，中野，柿沼 編，講談社サイエンスティフィク 1992発行，「ESR による O_2^- と $HO\cdot$ の測定法」，116～135頁
- (8) “物理化学Ⅰ．物質の構造”，池上雄作，岩泉正基，手老省三 共著，丸善，1992 発行
- (9) “物理化学Ⅱ．熱力学・速度論”，池上雄作，岩泉正基，手老省三 共著，丸善，1994 発行（予定）
- (10) 分担執筆：Proceedings of the Third World Congress of Theoretical Organic Chemists (WATOC '93), July 18-24, 1993 (Toyohashi, Japan). Title: A.Toyota, T.Muramatsu, Y.Ikegami; Occurrence of Long C-C Single Bonds in Stereomers of 6,7,12a,12b-Tetrahydridipyrido[1,2-a:2',1'-c]pyrazine and its Congeners, 160

〔総 説 等〕

- (1) 有機化学覚え書き・“ビリジルとビリニジル”，池上雄作，化学の領域，**28** (6)，78-79 (1974)
- (2) 医学および生物学者のための活性酸素ラジカルのスピントラップ法，手老省三，池上雄作，中野稔，炎症，**5** (1)，3-13 (1985)
- (3) Kinetic ESR and CIDEP Studies on the Monomer-Dimer Equilibrium Systems of Pyridinyl Radicals, Y.Ikegami, Rev.Chem.Intermed., **7**(1), 91-109 (1986)
- (4) OH ラジカルのトラッピング，池上雄作，ぶんせき，496-498 (1986, No.7)
- (5) The Thermal and Photochemical Behaviors of the Cyclomers of Ethylenebis- and Trimethylenebis(pyridinyl) Diradicals, T.Muramatsu, Y.Ikegami, K.Hanaya, Heterocycles, **30**(2), 1302-1318 (1990)
- (6) 活性酸素ラジカルの ESR，池上雄作，活性酸素・フリーラジカル，**2** (4)，491-497 (1991)
- (7) ビリジニルラジカルのモノマー—ダイマー平衡とその光化学，池上雄作，手老省三，秋山公男，東北大学反応化学研究所報告，**1**，23-43 (1991)

